

**Abstract**

The present invention provides compositions comprising the 15-lipoxygenase-1 (15-LO-1) or 15-lipoxygenase-2 (15-LO-2) gene such that 15-LO-1 or 15-LO-2 protein  
5 expression is replaced or replenished in the ocular surface epithelium of postmenopausal women suffering from dry eye. Thus, methods for treatment of dry eye in postmenopausal women are further provided.